DT07 Rec'd PCT/PTO 2 9 DEC 2004

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|---|---|---|
| (REV 10-94) | DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFF | |
| TRANSMITTAL LETTER | TO THE UNITED STATES | 10873.1603USWO |
| | ED OFFICE (DO/EO/US) | |
| CONCERNING A FILIN | NG UNDER 35 U.S.C. 371 | |
| | | U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) Unknown 0/519817 |
| INTERNATIONAL APPLICATION NO. | INTERNATIONAL FILING DATE | PRIORITY DATE CLAIMED |
| PCT/JP2003/008639 | July 8, 2003 | July 8, 2002 |
| TITLE OF INVENTION | | |
| PHOTONIC CRYSTAL OPTICAL WAVE | GUIDE | |
| APPLICANT(S) FOR DO/EO/US | | |
| KITTAKA et al. | | |
| Applicant herewith submits to the United States D | Designated/Elected Office (DO/EO/US) the follow | ring items and other information: |
| | - | |
| [X] This is a FIRST submission of items con This is a SECOND or SUBSEQUE | ncerning a filing under 35 U.S.C. 371. ENT submission of items concerning a filing unde | or 35 ITS C 371 |
| 3. [X] This express request to begin national ex | xamination procedures (35 U.S.C. 371(f)) at any ti | ime rather than delay |
| | pplicable time limit set in 35 U.S.C. 371(b) and Policies Francisco | |
| 4. [] A proper Demand for International Preli | iminary Examination was made by the 19th month | from the earliest claimed priority date. |
| 5. [X] A copy of the International Application | | |
| a. [] is transmitted herewith (reb. [X] has been transmitted by the Int | equired only if not transmitted by the International | Bureau). |
| | ernational Bureau. lication was filed in the United States Receiving C | Office (RO/US) |
| | pplication into English (35 U.S.C. 371(c)(2)). | ` ' |
| | ational Application under PCT Article 19 (35 U.S. required only if not transmitted by the International Bureau. | |
| c. [] have not been made; howe | ever, the time limit for making such amendments h | nas NOT expired. |
| d. [X] have not been made and will no | ot be made. | |
| 8. [] A translation of the amendments to | the claims under PCT Article 19 (35 U.S.C. 371(c | 2)(3)). |
| 9. [X] An unsigned oath or declaration of the ir | iventor(s) (35 U.S.C. 371 (c)(4)). | |
| 10. [] A translation of the annexes to the I (35 U.S.C. 371(c)(5)). | nternational Preliminary Examination Report und | er PCT Article 36 |
| Items 11. to 16. below concern document(s) or i 11. [] An Information Disclosure Statement | | |
| 12. [] An assignment document for record | ling. A separate cover sheet in compliance with 37 | 7 CFR 3.28 and 3.31 is included. |
| 13. [X] A FIRST preliminary amendment. [] A SECOND of SUBSEQUENT pre | liminary amendment. | |
| 14. [] A substitute specification. | | |
| 15. [] A change of power of attorney and/o | or address letter. | |
| 16. [X] Other items or information: Application PCT/IB/308 | Data Sheet (5 pages), International Publication P | age, Form PCT/ISA/210, Form PCT/IB/304, Form |
| | | |

| , | | | | | | DT12 Rec'd PCT/ | PTO 29 DEC 2004 | | | |
|--|-----------|------------------------------------|--------------------------|--|--------------------------|----------------------------|-----------------|--|--|--|
| U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.5) | | | INTERNATIONAL APPLICATIO | | ATTORNEY'S DOCKET NUMBER | | | | | |
| Unknown | 10 | 15198 | 317 | PCT/JP2003/008639 | · | 10873.1603USWO | | | | |
| BASIC NATION | NAL F | EE (37 CFR 1. | .492(a) (1)-(| (5)): | \$300.00 | \$300.00 | | | | |
| [X] b) Examination | ion fee. | •••••• | | | \$200.00 | \$200.00 | | | | |
| [X] c) Search fee\$500.00 | | | | | \$500.00 | | | | | |
| | | | TOTAL | OF ABOVE CALC | CULATIONS = | \$1000.00 | | | | |
| sequence listi | ing or c | | am listing file | ed in paper over 100 sheet ed in an electronic mediur raction thereof. | | | | | | |
| Total Sheets | fraction | | fraction | of each additional 50 or thereof (round up to a whole number | | | | | | |
| 48 -100 = | + | /50 = | | | X \$250.00 | \$0 | | | | |
| Surcharge of \$130 months from the e | | | | laration later than [] 20 [FR 1.492(e)). |] 30 | \$0 | | | | |
| CLAIMS | | NUMBER | FILED | NUMBER EXTRA | RATE | | | | | |
| Total claims | | 19 | -20 = | 0 | X \$50.00 | \$0 | , | | | |
| Independent clain | ms | 1 | -3 = | 0 | X \$200.00 | \$0 | | | | |
| MULTIPLE DEP | ENDE | NT CLAIM(S) | (if applicabl | le) | + \$360.00 | \$0 | | | | |
| | | | TOTAL | OF ABOVE CALC | ULATIONS = | \$1000.00 | | | | |
| Reduction by 1/2 for filing by small entity, if applicable. Small entity status is claimed pursuant to 37 CFR 1.27 | | | | \$0 | | | | | | |
| SUBTOTAL = | | | | | \$1000.00 | | | | | |
| Processing fee of \$130.00 for furnishing the English translation later than [] 20 [] 30 months from the earliest claimed priority date (37 CFR 1.492(f). | | | | | \$0 | | | | | |
| TOTAL NATIONAL FEE = | | | | | \$1000.00 | | | | | |
| Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + | | | \$0 | | | | | | | |
| | | | | TOTAL FEES I | ENCLOSED = | \$1000.00 | | | | |
| | | | | | | Amount to be: refunded | \$0 | | | |
| ı , | | | _ | | | charged | \$0 | | | |
| a. [X] Check(s) | ;) in the | amount of \$10 | 00.00 to cov | er the above fees is enclose | sed. | <u> </u> | <u> </u> | | | |
| | | ny Deposit Acco | | in the | amount of \$ | to cover the abov | e fees. | | | |
| | | oner is hereby au Deposit Accou | | charge any additional fees | s which may be requ | uired, or credit any | | | | |
| | | | | 7 CFR 1.494 or 1.495 ha | | petition to revive (37 CFR |) . | | | |
| SEND ALL CORRESPON Douglas P. Mue | ıeller | | | | SIC | NATURE. | | | | |
| MERCHANT & GOULD P.O. Box 2903 SIGNATURE: | | | | | | | | | | |
| | | | | | | ME: Douglas P. Mueller | | | | |

REGISTRATION NUMBER: 30,300

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

KITTAKA et al.

DT12 Rec'd PCT/PTO 2 9 DEC 2004

Docket:

10873.1603USWO

Title:

PHOTONIC CRYSTAL OPTICAL WAVEGUIDE

CERTIFICATE UNDER 37 CFR 1.10

'Express Mail' mailing label number: EV 495870147 US

Date of Deposit: December 29, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 OFR 1110 and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Name:

Mail Stop PCT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

We are transmitting herewith the attached:

Transmittal sheet, in duplicate, containing Certificate under 37 CFR 1.10.

National Stage PCT Patent Application: Spec. 30 pgs; 19 claims; Abstract 1 pgs. The fee has been calculated as shown below in the 'Claims as Filed' table.

18 sheets of formal drawings

An unsigned Combined Declaration and Power of Attorney

A check in the amount of \$1000.00 to cover the Filing Fee

Application Data Sheet, 5 pages.

Other: Form PTO-1390, Preliminary Amendment (3 pages), International Publication Page, Form PCT/ISA/210, Form PCT/IB/304, Form PCT/IB/308

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CLAIMS AS FILED

| Number of Claims Filed | No. | In Excess of | Extra | Rate | | Fee |
|-------------------------------|-----|--------------|-------|----------|---|---------|
| Total Claims | 19 | 20 | 0 | 50.00 | = | 0.00 |
| Independent Claims | 1 | 3 | 0 | 200.00 | = | 0.00 |
| Multiple Dependent Claims Fee | | | | | = | 0.00 |
| Basic Filing Fee | | | | | = | 300.00 |
| Search Fee | | | | | = | 200.00 |
| Examination Fee | | | | | = | 500.00 |
| Utility Application Size Fee | 48 | 100 | 0 | 250.00 | = | 0.00 |
| | | | | | | |
| Total | | | | | = | 1000.00 |

Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725. A duplicate of this sheet is enclosed.

MERCHANT & GOULD P.C.

P.O. Box 2903, Minneapolis, MN 55402-0903

(612) 332-5300

Name: Douglas P. Mueller

Reg. No.: 30,300 Initials: DPM/sbd

23552

PATENT TRADEMARK OFFICE

DOCKET NOTIFICATION SLIP

TO: PATENT DOCKETING

Applicant:

KITTAKA et al.

Title:

PHOTONIC CRYSTAL OPTICAL WAVEGUIDE

Docket:

10873.1603USWO

Express Mail No.: EV 495870147 US Date of Deposit: December 29, 2004

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